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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/773,531

02/06/2004

Naozumi Arimoto

8305-235US (NP146-1)

6798

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7590

03/20/2008

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EXAMINER

MCAVOY, ELLEN M

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

03/20/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/773,531	Applicant(s) ARIMOTO, NAOZUMI	
	Examiner Ellen M. McAvoy	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watts et al (6,121,209) in combination with Roby et al (5,726,132).

Applicant's arguments filed 26 December 2007 have been fully considered but they are not persuasive. As previously set forth, Watts et al ["Watts"] disclose lubricating oil compositions suitable for use in automatic transmissions which comprise a major amount of lubricating oil and minor amounts of (A) a phosphoric acid-containing compound and (B) an ashless antioxidant. Watts teaches that the preferred range of component (A) corresponds to approximately 0.02 to 0.04 mass percent phosphorus in the oil. See column 3, lines 6-13. Watts teaches that desirably a source of boron is present in the oil composition which may be present in the form of borated dispersants, borated amines, borated alcohols, borated esters or alkyl borates. See column 3, lines 14-20. Applicant's invention differs by adding calcium-based additives and at least one sulfur-based additive selected from (B) dithiocarbamates other than metal dithiocarbamates, (C) dithiophosphates other than metal dithiophosphates, (D) trithiophosphites, and derivatives thereof. Watts also allows for the addition of one or more additives to form a fully formulated lubricating oil composition including extreme pressure agents and detergents. Amounts of the various additives which may be added to the lubricant composition

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are cited in the Table in column 3 of Watts. Roby et al ["Roby"] is added to teach that sulfur-based antiwear additives and alkaline earth metal-based detergents are conventional additives to lubricating oil compositions suitable for use in transmissions. See column 2, lines 8-45. Roby discloses lubricant compositions suitable as engine lubricating oils, as automatic transmission fluids and as hydraulic fluids, comprising a base oil and (A) a metal-free phosphorus containing compound, (B) an acylated-nitrogen containing compound, (C) a second phosphorus compound other than (A), (D) an alkali or alkaline earth metal salt detergent, and (E) a metal-free dithiocarbamate compound. Amounts of the additives are set forth in column 36, lines 6-58. Roby teaches that the composition may contain other conventional lubricant additives including detergents, dispersants, antioxidants, etc. See column 36, lines 59-65. Having the prior art references before the inventors at the time the invention was made it would have been obvious to the skilled artisan to have added the antiwear additives of Roby to the lubricating oil compositions of Watts if so desired. The examiner is of the position that the transmission compositions of Watts in combination with Roby meet the limitations of the above rejected claims. Although mass ratios of phosphorus : calcium : boron :sulfur are not specifically set forth, the amounts set forth for compounds containing each of these elements result in lubricant compositions meeting the claimed ratio.

In the response applicant argued that the invention to Watts is not designed to provide excellent μ -V characteristics so as to always be maintained in a positive gradient in belt type CVTs to prevent the occurrence of scratch noises even after being used for a long period of time. Applicant argued that since Watts does not acknowledge the need to maintain excellent μ -V characteristics or a positive gradient thereof, there would have been no motivation to adjust the

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parameters (such as sulfur content) which are necessary to obtain such results. This is not deemed to be persuasive because the claims at issue are drawn towards compositions, and not towards methods of lubricating a transmission. The examiner is of the position that applicant is arguing points that are simply not relevant to the claimed invention which is lubricating oil compositions. Further, as set forth above, the prior art references to both Watts and Roby teach the use of the lubricant compositions as automatic transmission fluids. Although the property of sustaining excellent μ -V characteristics is not specifically set forth in the prior art, it has been held that the discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer. *Atlas Powder Co. v. Ireco Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). *In re Crish*, 393 F.3d 1253, 1258, 73 USPQ2d 1364, 1368 (Fed. Cir. 2004).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bloch et al (5,443,744) in combination with Roby et al (5,726,132).

Applicant's arguments filed 26 December 2007 have been fully considered but they are not persuasive. As previously set forth, Bloch et al [“Bloch”] disclose lubricating oil compositions which are suitable as automatic transmission fluids containing a base oil and the reaction product of a phosphating agent and a thioalcohol. Bloch teaches that the reaction product may be added to the base oil in an amount corresponding to approximately 0.02 to 0.04 mass percent phosphorus in the oil. See column 4, lines 37-44. Bloch teaches that a boron source such as borated dispersants, borated amines, borated alcohols, borated esters or alkyl borates may be added, and that a molar ratio of boron to the phosphorus in the reaction product (B/P) is preferably 0.5 to 2.0. See column 4, lines 45-52. Applicant's invention differs by adding calcium-based additives and at least one sulfur-based additive selected from dithiocarbamates other than metal dithiocarbamates, dithiophosphates other than metal dithiophosphates, trithiophosphites, and derivatives thereof. However, Bloch also allows for the addition of one or more additives to form a fully formulated lubricating oil composition including extreme pressure agents and detergents. Amounts of the various additives which may be added to the lubricant composition are cited in the Table in column 5 of Bloch. Roby et al [“Roby”] is added to teach that sulfur-based antiwear additives and alkaline earth metal-based detergents are conventional additives to lubricating oil compositions suitable for use in automatic transmissions. See column 2, lines 8-45. Roby discloses lubricant compositions suitable as engine lubricating oils, as automatic transmission fluids and as hydraulic fluids, comprising a base oil and (A) a metal-free phosphorus containing compound, (B) an acylated-nitrogen containing compound, (C) a second phosphorus compound other than (A), (D) an alkali or alkaline earth metal salt detergent, and (E) a metal-free dithiocarbamate compound. Amounts of

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the additives are set forth in column 36, lines 6-58. Roby teaches that the composition may contain other conventional lubricant additives including detergents, dispersants, antioxidants, etc. See column 36, lines 59-65. Having the prior art references before the inventors at the time the invention was made it would have been obvious to the skilled artisan to have added the antiwear additives of Roby to the lubricating oil compositions of Bloch if so desired. The examiner is of the position that the transmission compositions of Bloch in combination with Roby meet the limitations of the above rejected claims. Although mass ratios of phosphorus : calcium : boron :sulfur are not specifically set forth, the amounts set forth for compounds containing each of these elements result in lubricant compositions meeting the claimed ratio.

In the response applicant argued that the invention to Bloch is not designed to provide excellent μ -V characteristics so as to always be maintained in a positive gradient in belt type CVTs to prevent the occurrence of scratch noises even after being used for a long period of time. Applicant argued that since Bloch does not acknowledge the need to maintain excellent μ -V characteristics or a positive gradient thereof, there would have been no motivation to adjust the parameters (such as sulfur content) which are necessary to obtain such results. This is not deemed to be persuasive because the claims at issue are drawn towards compositions, and not towards methods of lubricating a transmission. The examiner is of the position that applicant is arguing points that are simply not relevant to the claimed invention which is lubricating oil compositions. Further, as set forth above, the prior art references to both Bloch and Roby teach the use of the lubricant compositions as automatic transmission fluids. Although the property of sustaining excellent μ -V characteristics is not specifically set forth in the prior art, it has been held that the discovery of a previously unappreciated property of a prior art composition, or of a

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scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer. *Atlas Powder Co. v. Ireco Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). *In re Crish*, 393 F.3d 1253, 1258, 73 USPQ2d 1364, 1368 (Fed. Cir. 2004).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M. McAvoy whose telephone number is (571) 272-1451. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ellen M McAvoy/
Ellen M McAvoy
Primary Examiner
Art Unit 1797

EMcAvoy
March 13, 2008